

Notice of Allowability

Application No.

10/691,311

Applicant(s)

JUVE ET AL.

Examiner

Lisa M. Solomon

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/05/2007.
2. ☒ The allowed claim(s) is/are 12, 14, 16, 18-20, 27, 33, 34 and 37-39.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

Allowable Subject Matter

1. Claims 12, 14, 16-20, 27, 33-34, 37-39 have been allowed.

The following is an examiner's statement of reasons for allowance: The primary reason for allowance of claims 12, 27, 33-34 is the inclusion of the limitation of a printing system that includes "the controller is configured to generate pre-warming signals for the required plural portions after printing of said print swath has begun; and while printing said print swath, after ink ejection from one of said plural portions is no longer required to complete said print swath, the controller is configured to cease to generate a pre-warming signal." (claim 12), "means for generating the pre-warming signal for one said plural portions...means for ceasing generation of the pre-warming signal during printing of the print swath after printing said initial segment" (claim 27), "analyze an upcoming print swath to determine which of said plural portions are required to eject ink in order to print the swath in accordance with a predefined selection criteria different from the upcoming print swath" (claim 33), and "supply the pre-warming signal to one or more heater elements of only portions required to eject ink the print the swath...the controller stops supplying the pre-warming signal to the heater elements of the portions required to eject the ink to print the swath during the printing of the swath" (claim 34) . It is this limitation found in the claims, as it is claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over prior art.

The primary reason for the allowance of claims 12, 16, 18-20, 37-39 is the inclusion of the limitations of a method of pre-warming a multi-color printhead that includes "generating a pre-warming signal for said dispensing portion... omitting generation of a pre-warming signal for said non-dispensing portion to produce no pre-warming thereof" (claims 14, 16, 18), "printing a print swath from a beginning point to an ending point; continuing generation of the pre-warming signal after printing from the beginning point; monitoring printing temperature of each of said plural portions during said printing; and ceasing to generate the pre-warming signal when the printing temperature exceeds a threshold temperature before printing to the ending point" (claim 19), "...continuing generation of the pre-warming signal for said transactional portions during printing of the initial segment and ceasing generation of the pre-warming signal during printing of the final segment" (claim 20), "beginning printing of a print swath having a plurality of segments; and ceasing generation of the pre-warming signal for a particular dispensing portion during printing of a final segment of the print swath" (claim 37), and "beginning printing of a print swath; and ceasing generation of the pre-warming signal for a particular dispensing portion during printing of the print swath after ink dispensing from the particular dispensing portion is concluded for the print swath" (claim 38). It is these limitations found in the claims, as they are claimed in the combination that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

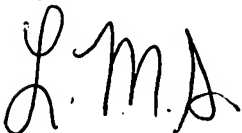
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa M. Solomon whose telephone number is (571) 272-1701. The examiner can normally be reached on Monday - Friday from 8:00 am - 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew Luu can be reached on (571) 272-7663. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Lisa M. Solomon
Patent Examiner
12/15/2007



MATTHEW LUU
SUPERVISORY PATENT EXAMINER